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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/336,207 06/18/99 MCCRACKEN

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026386 PM82/0720  
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DES MOINES IA 50309-3993

 EXAMINER

HORTON, Y

ART UNIT	PAPER NUMBER
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3635 *11*

DATE MAILED:

07/20/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

<b>Office Action Summary</b>	Application No. 09/336,207	Applicant(s) ROBERT G. McCACKEN
	Examiner Yvonne M. Horton	Art Unit 3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)  Responsive to communication(s) filed on May 7, 2001

2a)  This action is FINAL. 2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle* 1035 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

4)  Claim(s) 1-11 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-11 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

15)  Notice of References Cited (PTO-892)

18)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

16)  Notice of Draftsperson's Patent Drawing Review (PTO-948)

19)  Notice of Informal Patent Application (PTO-152)

17)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). 10

20)  Other: \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1,4-5 and 8-10 stand rejected under 35 U.S.C. 103(a) as being unpatentable over CH 000414118 in view of U.S. Patent #3,716,959 to BERNARDI. CH 000414118 discloses a beam (B) including a pair of longitudinally extending and opposing flanges (2) each having a central web section (W), a pair of inwardly extending leg sections (L); and a convoluted web member (1) having alternating protrusions (4) adjacent to leg sections (L), (See marked-up attachment). The web member (1) is secured to the central web section (W) of the flanges (2), and the protrusions (4) are secured to the leg sections (L) by securing means (3). CH 000414118 discloses the basic claimed beam except for the use of end plates. The use of brackets and end plates to provide for the capability of interconnecting beam members is old and very well known in the art. BERNARDI teaches that it is known in the art to provide a beam structure (10) with end plates (36). It would have been obvious to one having ordinary skill in the art to provide the beam member of CH 000414118 with the end plates of BERNARDI in order to enable adjacent beam structures to be secured together and to provide the beam structure with added stiffness adjacent the ends thereof. Without end plates, a beam is weaker at the ends and are more likely to give under force applied at the ends.

In reference to claims 4 and 5 the web member (W) and the flanges (2) of CH 000414118 are coextensive in length and are made from sheet metal, (obtained from a brief translation).

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In regards to claims 8 and 9, the web member (W) is secured to the central web section (20) of the flanges (2) by welds (3), and the protrusions (4) are also secured to the leg sections (L) by welds (3).

Regarding claim 10, the flanges are formed from sheet material, a material that inherently enables the flange members to be penetrated if desired or needed.

3. Claims 2,3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over CH 000414118 in view of U.S. Patent #3,716,959 to BERNARDI as applied to claim 1 above, and further in view of U.S. Patent #6,253,529 to De BOER. As discussed in paragraph 2 above, CH 000414118, as modified by BERNARDI, discloses the basic claimed beam member except for the inwardly extending sections of the opposing flanges being recessed. Although it is old and very well known in the art to form a recess in a member to flushly accommodate and tightly position a second member adjacent thereto, De BOER teaches that it is known in the art to form recesses (19,34,35) in the inwardly extending legs (14,15) of member (12). Hence, it would have been obvious to one having ordinary skill in the art to provide the inwardly extending legs of the opposing flanges of CH 000414118, as modified by BERNARDI, with the recesses of De BOER in order to ensure a proper, flush and secure fit between the end plate and the adjacent and/or interfitting members.

In further reference to claim 3, the size of the recess with respect to the end plate would have been an obvious matter of design choice depending upon how securely the end plate is needed to be positioned against the opposing flanges. If not play id desired, the size of the recess is considerably close to the thickness of the end plate.

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In further regards to claim 11, the flanges (2) are C-shaped and leg sections (2) include in-turned portions (IT), (See also the marked-up attachment from the previous Official Action dated 02/05/01).

4. Claims 6 and 7 stand rejected under 35 U.S.C. 103(a) as being unpatentable over CH 000414118 in view of U.S. Patent #3,716,959 to BERNARDI, as applied to claim 1 above, and further in view of U.S. Patent #5,956,919 to McCACKEN. CH 000414118, as modified by BERNARDI discloses the basic claimed beam except for the specifics of the material characteristics. McCACKEN, in column 3, lines 25-29, teaches that the metal forming the web and the metal forming the flanges have "distinct" characteristics and thicknesses - the web being 0.0598 inches and 16 gauge and the flanges being 0.0747 inches and 14 gauge. Hence, it would have been obvious to one having ordinary skill in the art to form the web and flanges out of a metal having "distinct" characteristics and thicknesses in order to be used as a replacement for lumber beams which are conventional in the art for door and window framing members, but are extremely susceptible to warping when encountered by moisture; or for use in forming supports for concrete structures. The applicant is further reminded that material selection and the thickness thereof is an obvious matter of design choice that depends on the desired performance characteristics of the resulting beam member.

***Response to Arguments***

5. Applicant's arguments filed 5/7/01 have been fully considered but they are not persuasive, in part.

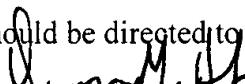
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In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a recessed portion to accomplish a full moment connection) are not recited specifically in independent rejected claim(s) 1 and all claims depending therefrom. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to the applicant's argument with respect to the Double Patenting rejection, this rejection has been withdrawn by the examiner.

6. Applicant's arguments with respect to claims 2,3 and 11 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne M. Horton whose telephone number is (703) 308-1909.

  
Yvonne M. Horton  
Patent Examiner  
Art Unit 3635  
July 15, 2001